MPF PROGRAM
PROPOSED LIGHTERAGE REMIX

SEALIFT SUPPORT PROGRAM OFFICE

NAVFACHQ

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PURPOSE/AGENDA

Obtain MARFOR Concurrence

- COS addition
- NL realignment

Agenda

- Background
- Solution
- Case for solution
- Recommendation

BACKGROUND

Operation Iraqi Freedom Lessons Learned

- **LCU has difficulty interfacing with MPF RRDF**
- **Barge ferry utilization affected by beach gradient**
  - **KNB has a gradient restricted environment**
    - Required use of 1+3 configured lighters (1-CSP + 2-CIN + 1-CBE)
  - **CSP stern must maintain 3ft of water beneath the keel to provide adequate engine cooling**

LCU-RRDF INTERFACE SOLUTION

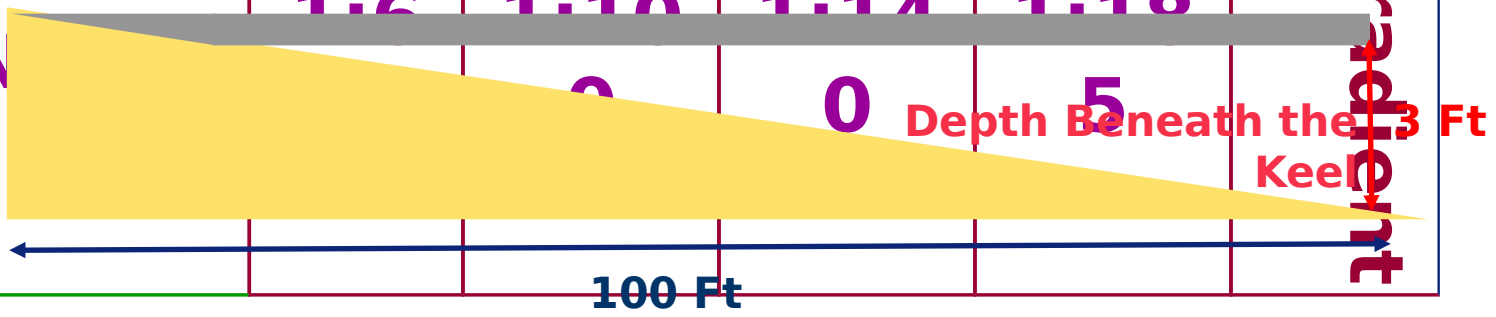
- **RRDF interface with LCU**
  - **Problem:** LCU ramp slides off MPF RRDF
  - **Goal:** Provide LCU/RRDF interface
  - **Solution:** Add one Causeway Off Shore (COS) to each MPS (E) - “rhino-horn” on COS ramp enables LCU/RRDF interface
  - **Impact**
    - TEU loss on MARTIN (SLWT relocated for 6 ship squadron)
    - TEU loss on STOCKHAM is due to addition of SLWT with MPSRON MPS realignment and not due to COS addition; COS will be loaded under the SLWT

GRADIENT RESTRICTION SOLUTION

- **Causeway Ferry Optimization**
  - **Problem:** Shallow-beach gradient limits CF use
  - **Goal:** Maximize throughput with gradient restriction
  - **Solution:** Increase length of CF's
    - Maximize number of 1+3 ferries (CSP+2CIN+CBE)
  - **Impact**
    - Reduced offload time with gradient restriction
    - Reduced crew requirement
    - Reduced maintenance requirement
    - Slightly increased offload time without gradient restriction
    - Reduced redundancy

INLS VS NL
BEACH GRADIENT LIMITATIONS

System	Ferry Configuration 1+1	1+2	1+3	1+4
NL	1:40	1:70	1:100	1:130
IN	1:6	1:10	1:14	1:18



3:100 = 1:33 Beach gradient

Gradient Restricted Offload Times

Gradient	Current				Proposed				Delta		
	Days	CF			Days	CF			Days		
		1+1	1+2	1+3		1+1	1+2	1+3		CF	Sect
>1:100 RRDF	21.5	0	0	4	10.9	0	0	8	-10.6	4	16
>1:100 w/o RRDF	14.4	0	0	7	9.1	0	0	11	-5.3	4	16
<1:100 RRDF	9.0	7	8	0	10.4	0	6	5	+1.4	-4	0
<1:100 w/o RRDF	7.7	1	14	0	9.1	0	0	11	+1.4	-4	0

Realignment will be more efficient in any offload situation where

- **Time alongside ship is the limiting factor (vice beach offload or CF tran**
- **Gradient restriction requires use of 1+3 or 1+4 configured CF's**

Gradient Restriction Frequency

CF Configuration	1+1	1+2	1+3	1+4	None	Total Sites*
Gradient	1:40	1:70	1:100	1:130	1:131	
EUCOM	3	6	6	7	1	8
PACOM	3	4	6	7	2	9
SOUTHCOM	5	6	6	6	1	7
CENTCOM	2	3	4	6	12	18
TOTAL	13	19	22	26	16	42
% of Reachable Sites	50 %	73 %	84%	100 %		

*59 Sites analyzed - unable to obtain gradient data on 11 (42 sites wi

MPSRON ONE (Remix)

WATERCRAFT BY VESSEL

SHIP NAME	COMPSON STAFF DESIGNATION	USMC MEU SLICE	NSE CAPABILITY SET	N/L: COS	N/L: CIN	N/L: CBE	N/L: CSP	N/L: SLWT	BOAT: LCM-8
SS OBREGON Waterman	Alt Flag for Comms			N/A	2 (4)	4 (3)	4 (3)	1	2
MV BOBO Amsea	Flag for Comms			N/A	2	4	4	1	2
MV WILLIAMS Amsea				N/A	2 (4)	4 (3)	4 (3)	1	1
MV BAUGH Maerk				N/A	2	3	3	1	1
USNS WHEAT MSC				1*	6	N/A	N/A	1	N/A
TOTAL:				1	14 (18)	15 (13)	15 (13)	5	6

N/L IN THEATER

N/L ONBOARD

LIGHTERAGE @ BIC

Quantities in parens reflect proposed remix for N/L & ABLTS.

Non-MEU Slice ships reduced LCM-8s from 2 to 1.

*Causeway Offshore Section (COS) column reflects proposed addition of 1 COS on each MPF (E) ship/MPSRON to improve RRDF capabilities.

***Note:**

MV Bobo & MV Baugh will receive INLS in MMC-9.

MPSRON ONE (Remix)

SUPPORT EQUIPMENT BY VESSEL

SHIP NAME	COMPSON STAFF DESIGNATION	USMC MEU SLICE	NSE CAPABILITY SET	HOSE REELS	LARC - V	NSE 20' ISO CONTAINERS
SS OBREGON Waterman	Alt Flag for Comms			3	2	33
MV BOBO Amsea	Flag for Comms			3	2	33
MV WILLIAMS Amsea				3 (0)	N/A	9 (7)
MV BAUGH Maersk				3 (0)	N/A	9 (6)
USNS WHEAT MSC				N/A	N/A	6
TOTAL:				12 (6)	4	90 (85)

EQUIPMENT IN THEATER

EQUIPMENT ONBOARD

EQUIPMENT@ BIC

Note:

Planned NSE space (MMC-8) is 10,855 sq ft & NTE 90 TEU's.

MPSRON TWO (Remix)

WATERCRAFT BY VESSEL

SHIP NAME	COMPSON STAFF DESIGNATION	USMC MEU SLICE	NSE CAPABILITY SET	N/L: COS	N/L: CIN	N/L: CBE	N/L: CSP	N/L: SLWT	BOAT: LCM-8
SS KOCAK Waterman				N/A	2 (4)	4 (3)	4 (3)	1	2
MV BUTTON Amsea	Flag for Comms			N/A	2 (4)	4 (3)	4 (3)	1	2
MV LOPEZ Amsea				N/A	2 (4)	4 (3)	4 (3)	1	1
MV PHILLIPS Maersk	Alt Flag for Comms			N/A	2	3	3	1	1
USNS STOCKHAM MSC				1*	6	N/A	N/A	1	N/A
TOTAL:				1	14 (20)	15 (12)	15 (12)	5	6

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MV LUMMUS Amsea	Flag for Comms			N/A	2 (4)	4 (3)	4 (3)	1	2
MV ANDERSON Maersk				N/A	2 (4)	3 (2)	3 (2)	1	1
MV BONNYMAN Maersk				N/A	2 (4)	3 (2)	3 (2)	1	1
MV HAUGE Maersk	Alt Flag for Comms			N/A	2 (4)	3 (2)	3 (2)	1	1
USNS MARTIN MSC				1*	6	N/A	N/A	N/A	N/A
TOTAL:				1	16 (26)	17 (12)	17 (12)	5	7

N/L IN THEATER

N/L ONBOARD

LIGHTERAGE @ BIC

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EQUIPMENT IN THEATER

EQUIPMENT ONBOARD

EQUIPMENT@ BIC

Note:

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PROPOSED MPF LIGHTERAGE REMIX

Advantages

- Greatly improved throughput with gradient restriction
- Reduced power craft maintenance
- Fewer crews

Disadvantages

- Reduced redundancy
- Slightly increased offload time without gradient restriction
- Negligible MPF weight increase
- TEU loss on MARTIN

RECOMMENDATION

- **Add 1 COS per MPSRON**
- **Realign MPF Lighterage as proposed**

PROPOSED MPF LIGHTERAGE REMIX

QUESTIONS?